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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/577,538

12/08/2008

Takayuki Shima

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SEED INTELLECTUAL PROPERTY LAW GROUP PLLC

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EXAMINER

DAVIS, DAVID DONALD

ART UNIT

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/577,538	<b>Applicant(s)</b> SHIMA ET AL.	
	<b>Examiner</b> David D. Davis	<b>Art Unit</b> 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

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## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Information Disclosure Statement***

2. Receipt is acknowledged of the Information Disclosure Statements (IDS) received April 26, 2006; July 24, 2008; September 17, 2008 and December 8, 2008.

### ***Specification***

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### ***Double Patenting***

Claims 1, 3, 5-10 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 3, 7-12 of U.S. Patent No. 7,573,803. Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets of claims require an optical recording disc constituted so as to enable recording and reproduction of data by irradiation with a laser beam. The optical recording disc including a laminated body formed by laminating a decomposition reaction layer 3 containing noble metal oxide as a primary component and a light absorbing layer so as to sandwich at least a dielectric layer and being constituted so that when it is irradiated with the laser beam. A bubble pit is

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formed in the decomposition reaction layer and fine particles of the noble metal precipitate into the bubble pit forming a recording mark in the decomposition reaction layer.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tominaga et al (US 5,252,370) in view of Hwang (US 7,348,124). As per claim 1, Tominaga et al shows in figures 1-2 an optical recording disc constituted so as to enable recording and reproduction of data by irradiation with a laser beam. The optical recording disc including a laminated body formed by laminating a decomposition reaction layer 3 containing noble metal oxide as a primary component and a light absorbing layer so as to sandwich at least a dielectric layer and being constituted so that when it is irradiated with the laser beam. A bubble pit is formed in the

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decomposition reaction layer and fine particles of the noble metal precipitate into the bubble pit. Tominaga et al also shows in figures 1-2 forming a recording mark in the decomposition reaction layer.

As per claim 2, Tominaga et al discloses in column 4, lines 24-47 and shows in figure 2 that the noble metal oxide contained in the decomposition reaction layer as a primary component is decomposed into a noble metal and oxygen when the decomposition reaction layer is irradiated with the laser beam. As per claim 3, Tominaga et al discloses in column 2, lines 51-65 and shows in figure 1 the noble metal oxide being platinum oxide and the platinum oxide decomposed into platinum and oxygen when the decomposition reaction layer is irradiated with the laser beam via the light transmission layer.

As per claim 4, Tominaga et al discloses the optical recording disc is irradiated with the laser beam. As the claims are directed to an optical disc, per se, the method limitations appearing in claim 4 have only been accorded weight to the extent that it affects the structure of the completed optical disc. Note that "[d]etermination of patentability in 'product-by-process' claims is based on product itself, even though such claims are limited and defined by process [i.e., "the bubble pit formed by an oxygen gas"], and thus product in such claim is unpatentable if it is the same as, or obvious form, product of prior art, even if prior product was made by a different process", *In re Thorpe, et al.*, 227 USPQ 964 (CAFC 1985). Furthermore, note that a "[p]roduct-by-process claim, although reciting subject matter of claim in terms of how it is made [i.e., "the bubble pit formed by an oxygen gas"] is still product claim; it is patentability of product claimed and not recited process steps that must be established, in spite of fact that claim may recite only process limitations", *In re Hirao and Sato*, 190 USPQ 685 (CCPA 1976).

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As per claim 5, Tominaga discloses in column 2, lines 62-68 and shows in figure 5 the light absorption layer containing at least one of Sb and Te. As per claim 6-10, Tominaga shows in figures 1 and 2 the dielectric layer and the light absorption layer are deformed when the optical recording disc is irradiated with the laser beam.

Tominaga et al is silent, however, as to the fine particles of the noble metal having a particle diameter of 2 nm to 15 nm.

Hwang et al discloses in column 3, line 46-55 fine particles of the noble metal having a diameter of 2 nm to 15 nm.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide the disc of Tominaga et al with fine particles of noble metal having a diameter of 2 nm to 15 nm as taught in Hwang. The rationale is as follows: one of ordinary skill in the art at the time the invention was made would have been motivated to provide a disc with fine particles of noble metal having a diameter of 2 nm to 15 nm so that they “can be read using a laser with a wavelength of, for example, 680 nm”. See column 3, lines 46-55.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David D. Davis whose telephone number is 571-272-7572. The examiner can normally be reached on Monday thru Friday between 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrea L. Wellington can be reached on 571-272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David D. Davis/  
Primary Examiner  
Art Unit 2627

ddd